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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,871	04/21/2006	Shin Kikuchi	100763	4790

38834 7590 09/15/2010  
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WASHINGTON, DC 20036

EXAMINER
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DAGER, JONATHAN M

ART UNIT	PAPER NUMBER
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3663

NOTIFICATION DATE	DELIVERY MODE
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09/15/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,871	<b>Applicant(s)</b> KIKUCHI ET AL.	
	<b>Examiner</b> JONATHAN M. DAGER	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,9,11-13,23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,9,11-13,23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 21-23 filed 06 July 201 have been fully considered but they are not persuasive.

The Applicant has contended that claims 1, 6, and 9, as amended, are not anticipated by Robotham (US 2002/0015042), and that the prior rejection of said claims should therefore be withdrawn.

The Examiner respectfully disagrees; regarding claim 1 6, and 9, Robotham has disclosed an invention which relates to the display of visual content on a client device using server-side rasterization of visual content. Visual content is rendered on a server system, transformed into bitmaps compatible with the display attributes of a client device, and transmitted for display on the client device. The invention allows the server to perform, in effect, as a remote browser for displaying Web pages, e-mail, e-mail attachments, electronic document and forms, database queries and results, drawings, presentations, and images at the client device. The approach is "remote" because the server does the rendering and the client provides the interface; "multi-level" because rendered visual content is represented as a multi-level set of raster representations; and constitutes a "browsing system" because the client and server share data about the source visual content element being browsed, and the client performs a specific browsing function assisted by the server (abstract).

Thus, Robotham discloses that in response to a query by a client device, the server will provide content based on the display attributes of the client device.

Art Unit: 3663

Robotham discloses that the invention is capable of handling virtually any desktop page (in both raster and text mode, with a multi-level interface shared between raster and text mode) and simultaneously handle any page designed for a tiny screen. The invention can essentially extract any part of a desktop page and convert it into a representation suitable for cell phone displays (para 0029).

Robotham discloses that in one embodiment of the present invention, adaptive rendering techniques can be used to combine server-side rendering, summary extractions, text-related transcoding and client-side rendering of small screen content. Small screen content is content specifically formatted for layout on a small screen (typically 320.times.240 or less in pixel dimensions). Examples of small screen content formats include the Wireless Markup Language (WML), Compact HTML (as used in the I-mode system), and the proposed XHTML Basic standard. The server 22 determines if the client 24 can support client-side rendering of a small screen format. If the client 24 does support client-side rendering of small screen format, then adaptive rendering can be used to send content in the supported small screen format(s) to the client 24 for client-side rendering (para 0526).

Thus, the mobile phone terminal contains a display screen on which information is displayed, the display screen having prescribed dimensions and dot size.

Robotham discloses a computer network supporting the exchange of information includes at least two computers: a server 22 and a client 24 (para 0058). A server 22 includes a processor 2, a server memory 4, and a mass storage device 6. These components are in communication with each other through a communications bus, such as a Peripheral Component Interconnect (PCI) bus, an Accelerated Graphics Port (AGP) bus, or some other standard or proprietary bus.

Art Unit: 3663

An input/output (I/O) device, such as a modem, an Ethernet adapter, or a network interface card (NIC), also in communication with the bus, provides for the server's 22 exchange of information with other external devices, such as a client 24 (para 0059)

Thus, Robotham discloses a server with components capable of the functions those claimed.

The representative client 24, shown in FIG. 1, includes a processor 3, a memory 9, executable instructions defining a user interface 11, and a display 5. The client components are also in communication with one another through a local communications bus, similar in concept to the server communications bus. The client 24 processor 3 and memory 9 are also similar to those on the server 22, and client 24 can optionally include a mass storage device. A client display 5, such as a cathode ray tube, or a flat-panel display, allows the user to view visual content. Clients 24 such as portable computers, PDAs, and wireless phones, typically provide a flat-panel display 5, such as a liquid crystal display (LCD). When operated, the display 5 defines one or more client viewports 16, representing regions of the display 5 where different visual-information fields can be presented. In addition to an operating system and other programmed instructions, the client memory 7 contains regions dedicated to a user interface 9 and a client display surface 26 (para 0062-0063).

Thus, Robotham discloses a client side device with components equivalent to those claimed.

The nature of bitmap 14--that is, the manner in which content elements are rasterized 15 depends on the known or expected client display attributes. The bitmap 14 is compatible with the expected display attributes 44 if, for example, the bitmap 14 has a tonal range no greater than the

Art Unit: 3663

expected client tonal range and the bitmap has a pixel format that can be readily interpreted and/or directly used by the client device 24. Conversion to a suitable pixel format may be accomplished, for example, using a color lookup table or similar expedient (para 0068). If the client 24 must perform pixel transforms or image transform operations that require operations across multiple input (i.e., server-provided) pixels to generate each client-display pixel, then the pixel format is not considered to be compatible. A bitmap 14 can be compatible even if it has a different pixel resolution or different pixel aspect ratio from the expected client display attributes. Nonetheless, to minimize processing at the client side, the pixel transforms performed at the server 22 can optionally use the expected client display pixel resolution and aspect ratio as input parameters in order to generate display-ready data for the client (para 0069).

Thus, the server utilizes the mobile terminal provided display resolution to provide image data.

The client 24 responds to any user interface actions taken by the user related to the rasterized visual content (e.g., selection of a display item using a pointing device), and determines whether to transmit notification of the user's action to the server 22 for further processing. The server 22 interprets such events as user interface actions on its own proxy display surface 28 and responds by generating the appropriate events and/or actions on its display surface 28, which is transmitted to client 24 for display thereon. Consequently, event processing occurs cyclically, with events caused by user actions transmitted to the server, and appropriately updated display information provided to the client (para 0073).

Art Unit: 3663

Thus, the terminal contains stored image data constituting specific graphic symbols and arranged on the display, and a symbol image data transmission request information transmitting means, as well as means for receiving the symbol image data from the server.

Robotham discloses that the expected client display attributes 44 can be maintained at the server 22, and determined based on the client identification information. Alternatively, the expected client display attributes 44 can be transmitted by the client 24, saved at the server 22 or mass storage device 6 (see FIG. 1) in association with the client identification information 42, thereby facilitating future lookup based on the identification information 42. In other alternative embodiments, the expected client display attributes 44 are transmitted to the server 22 each time the client 24 establishes a communications session with the server 22 or updated by the client 24 when attributes of the allocated client display surface 26 change (para 0134).

Thus, the invention of Robotham discloses that the server side is capable receiving the symbol image data transmission request, process the request, discriminate the symbol image data transmitted to the mobile phone terminal on the basis of the resolution related information received, and transmit the discriminated data in correspondence with the resolution of the information display screen of the mobile phone.

Robotham discloses that processor 2, typically a central processing unit (CPU), controls all other parts of the server 22. Processor 2 can further include a control unit, an arithmetic and logic unit, and memory, where the memory can be registers, cache, random access memory (RAM), and read only memory (ROM). Mass storage device 6, such as a magnetic or optical disk drive, or a magnetic tape drive, stores large amounts of information that can be updated, maintained, and served upon request to other systems, such as a client 24. A server memory 4,

Art Unit: 3663

which may include volatile and non-volatile elements such as registers, cache, RAM, and ROM, provides a means of storing information required in the short term, or anticipated to be required in the short term, such as an operating system, executable computer program instructions, and data (para 0060).

Thus, it is disclosed that the server side image data database/memory can be updated with the newest versions of said data.

As cited above, the client 24 responds to any user interface actions taken by the user related to the rasterized visual content (e.g., selection of a display item using a pointing device), and determines whether to transmit notification of the user's action to the server 22 for further processing. The server 22 interprets such events as user interface actions on its own proxy display surface 28 and responds by generating the appropriate events and/or actions on its display surface 28, which is transmitted to client 24 for display thereon. Consequently, event processing occurs cyclically, with events caused by user actions transmitted to the server, and appropriately updated display information provided to the client (para 0073).

Thus, the user selects a portion of the display screen from which information is requested. This new information request is transmitted from the client to the server; the server provides the updated version of the data requested to the client device.

Robotham discloses that the server 22 can optionally send to the client 24 additional information, such as content type, related to the visual content element 10 and/or its constituent component 12. When a constituent component 12 is localized to a specific sub-region of the proxy display surface 28, the sub-region coordinates can also be sent. This information is utilized by server 22 to interpret the user's action. The client 24 can optionally customize its caching



Art Unit: 3663

mechanisms, display methods, and/or user interface based on the content type and constituent component sub-region coordinates. Similarly, the client 24 can provide customized responses to user interface actions based on the content type and/or coordinates of a constituent component 12 on the client display surface 26 (para 0074).

Thus, information transmitted and received between the client and server contains identification information, as well as the latest symbol image data updated by the server.

Robotham discloses that the client 24 is also freed from providing, or gaining access to, the data resources, files and/or databases to support the rendering function. For example, font libraries are used to properly render characters into the appropriate bitmap elements. If a font library is not available, then the visual content element 10 will not be accurately generated according to the original content design. Font libraries can require significant memory and, therefore, are often expensive to download and maintain on each client 24. Moreover, font libraries often require updates. In server-side rendering configuration, font libraries and similar data resources, files and/or databases are maintained centrally on the server 22. Centralized font support on the server 22 also has important advantages for the internationalization of visual content. In a server-side rendering configuration, visual content having an internationalized font can be viewed on any client device 24 if the server 22 has the proper font libraries (para 0081).

Thus, it is disclosed that the server includes server side image data identification memory storing the most recent updates to the symbol image data, as well as receiving update requests and transmitting all requested update data to the client side.

Further, the above provides for the client side discriminating if the symbol image data is indeed the newest data possible, on the basis of the server side data identification received.

Art Unit: 3663

Robotham discloses that a remote browser system in accordance with an illustrative embodiment of the invention includes a server 22 providing a multi-level remote browsing function. By this is meant that the same visual content is transformed into more than one rasterized representations. In accordance with this approach, the rendering function generates a rendered proxy display surface 28 for a visual content element. The server 22 transforms the proxy display surface 28 to a multi-level set of bitmaps 14a to 14n, each corresponding to, for example, a different portion of the content element, or to the entire element rendered at a different resolution, or different versions of the element (e.g., a game at different states of play or a transaction at different stages of processing). The multi-level set of bitmaps 14 is transmitted through the communications path 18 from the server 22 to the client 24 (para 0106).

In the example above, Robotham is disclosing that upon a user request, data reflecting the request (via data identification) will be transmitted from the server to the client device, where the data is stored and displayed. This data will represent the newest data, as claimed.

The client 24 may process user interface actions associated with its viewport 16 and determine (or change) the particular client display surface 26 that will be displayed. If the client 24 transmits one or more related user interface events to the server 22 through the communications path 18, information identifying the level or levels associated with the event is also transmitted to the server 22. Based on the mapping between the associated levels and the proxy display surface 28, the server 22 generates one or more related user action events on the proxy display surface 28, resulting in event processing functions. Event processing typically results in changes to the proxy display surface 28 or the generation of a new proxy display surface 28 (para 0108).

Art Unit: 3663

In embodiments performing functions that require client/server communications, such as requests for rendered visual content, bookmark refreshes, or dynamic selections, the client/server communications can be modeled as requests/responses referencing an XML representation of the visual content element 10. In these embodiments, the client 24 and server 22 share portions of a common data representation model for the referenced visual content element 10. The server 22 provides updates, such as providing a selected region of a detail representation or providing a text-related transcoding for a selected region, and the client processes the updates as changes to its XML model of the referenced visual content element 10 (para 0120).

Combined, para 0106 and para 0108 as disclosing that which is claimed; namely, a user receives new data on their display, rendered to the display attributes of their device, and can navigate all the data received. If the user has a new data request that has already been met by the previous request, no new request is issued since the processor of the client device has already discriminated that the old data is the newest data. However, if the received data from the prior request does not match the newest request, the received data is considered old data and new data is requested from the server.

Paragraph 0120 adds that the processing of the client device automatically checks for updates from the server; this is yet another way in which Robotham has met the discrimination embodiments of the claimed invention with respect to updating the client device with the newest data available on both the client and server side.

Therefore, since Robotham still anticipates all embodiments of the present invention as stated in amended claims 1, 6, and 9 explicitly and implicitly, said claims remain rejected under

Art Unit: 3663

under 35 U.S.C. 102(b) for those reasons cited above, and those mentioned in the prior office action, which is incorporated herein.

1a. It is noted that the Applicant has contended, see page 22 paragraphs 2-3, that Robotham has not anticipated the embodiment wherein the data is discriminated on the client and server side as to its age; i.e. is the data the newest data available.

The Examiner respectfully disagrees; as cited above in paragraph 0120, Robotham clearly discloses the server receiving the newest data, transcoding the time information onto the code of the symbol image data, and the client, either by user intent or automatically, requesting/refreshing the data with the server to discern if the symbol image data is indeed the latest data possible. If the data is old, new data is requested by the client side. Also see Robotham at 0121 (version data updates), para 0122 (GUI/protocol exchange data), para 0134 (automatic updates upon establishing communication), etc.

Therefore, Robotham still discloses all embodiments of claims 1, 6, and 9, and said claims remain rejected under 35 U.S.C. 102(b) for those reasons cited above and those mentioned in the prior office action, which is incorporated herein.

1b. Even if Robotham does not anticipate the contended embodiments, which is not an admission by this office, it is noted that the claims contain multiple statements of intended use or field of use (e.g. “receiver that receives”, “...transmits, before creating...”, “capable of”, etc.). These statements of intended use or field of use are essentially method limitations. Thus, these

Art Unit: 3663

claims, as well as other statements of intended use, do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions.

Apparatus claims cover what a device is not what a device does.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Additionally, the terms “configured to” or “arranged to” are considered to be structurally modified statements and are not intended use. Claims amended to include the above listed language may patentably distinguish themselves structurally.

Therefore, claims 1, 6, and 9 remain rejected under 35 U.S.C. 102(b) for those reasons above, and those cited in the prior office action, which is incorporated herein.

2. The Applicant has contended, see arguments presented 06 July 2010 page 22 last paragraph, that the combination of Robotham and Petchatnikov (US 2004/0030493) does not teach the claimed embodiments due to Robotham not disclosing the amended embodiments of base claim 4.

The Examiner respectfully disagrees; amended claim 1 remains rejected under 35 U.S.C. 102(b); subsequently, claim 4 still remains rejected under 35 U.S.C. 103(a) for those reasons cited above, and those mentioned in the prior office action(s), which are incorporated herein.

3. Although not specifically mentioned in the arguments, all claims depending from claims 1, 6, and 9 remain rejected under their respective grounds as mentioned in the prior office action(s), which are incorporated. Further, claims 5, 12, 13, 23, and 24, and any claims descendent therefrom remain rejected under their respective grounds as mentioned in the prior office action(s), which are incorporated herein.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JONATHAN M. DAGER** whose telephone number is (571)270-1332. The examiner can normally be reached on 0830-1800 (M-F).

Art Unit: 3663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

10 September 2010

/JACK KEITH/

Supervisory Patent Examiner, Art Unit 3663